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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,972	06/10/2004	Stephane Hiron	68.0435	3971

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SCHLUMBERGER RESERVOIR COMPLETIONS
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ROSHARON, TX 77583

EXAMINER

COY, NICOLE A

ART UNIT	PAPER NUMBER
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3672

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/709,972

Applicant(s)

HIRON ET AL.

Examiner

Nicole Coy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-37 and 39-41 is/are allowed.
- 6) ☒ Claim(s) 1-26 and 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/21/07</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3-10, 14-17, and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by French (USP 6,595,296).

With respect to claim 1, French discloses a valve for use with a control line disposed in a wellbore, comprising: a shuttle valve (24) functionally connected to the control line (65); the shuttle valve (24) adapted to enable pressure transfer through the control line from both a downhole and an uphole direction during normal operating conditions (see column 3 lines 46-52); and the shuttle valve (24) adapted to seal the control line when a pressure spike occurs from the downhole direction (wherein the shuttle valve 24 is capable of sealing the control line).

With respect to claim 3, French discloses that a shuttle valve (24) is disposed in the control line (65).

With respect to claim 4, French discloses that the shuttle valve (24) is located in a housing (14).

With respect to claim 5, French discloses that the housing (14) is a joint that connects two tubing pieces together (wherein 14 connects to 12; see figure 1B).

With respect to claim 6, French discloses that the control line is functionally connected to a downhole tool (see column 1 lines 36-40).

With respect to claim 7, French discloses that the downhole tool comprises a valve, a packer or a perforating gun (see column 3 lines 23-39, wherein French discloses a valve).

With respect to claim 8, French discloses that the shuttle valve comprises a shuttle (24) slidably disposed within an orifice located on a constrictor in the housing (14; see figures 1A and 2).

With respect to claim 9, French discloses that the constrictor includes at least one opening to allow fluid flow therethrough (see figures 1A and 2).

With respect to claim 10, French discloses that the shuttle (24) is movable between a first position, in which a first shuttle surface seals against a first housing surface to prevent flow of fluids from the downhole direction (see figure 1A), and a second position, in which a second shuttle surface seals against a second housing surface to prevent flow of fluids from the uphole direction (see figure 2).

With respect to claim 14, French discloses that the shuttle valve (24) comprises a shuttle slidably disposed within a cavity (see figure 1A) in the housing and the shuttle transfers pressure within the control line (wherein the shuttle would inherently transfer pressure in the control line as it moved from the position shown in figure 1A to the position shown in figure 2).

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With respect to claim 15, French discloses that the shuttle includes at least one dynamic seal (32) to enable a sealing and sliding movement of the shuttle against the cavity.

With respect to claim 16, French discloses that the shuttle is movable between two normal operating positions, a first position in which a first volume remains in the cavity adjacent the first end of the shuttle (see figure 1A) and a second position in which a second volume remains in the cavity adjacent the second end of the shuttle (see figure 2).

With respect to claim 17, French discloses that the shuttle includes a downhole pressure spike position wherein the second shuttle end abuts the uphole surface of the cavity and does not allow pressure communication from the downhole direction (see figure 1A).

With respect to claim 38, French discloses a barrier for use with a control line disposed in a wellbore, comprising: a valve (24) functionally connected to the control line (65); the valve adapted to enable pressure transfer through the control line from both a downhole and an uphole direction during normal operating conditions (see column 3 lines 46-52); and the valve adapted to seal the control line when a pressure spike occurs from the downhole direction (wherein seal 24 is capable of sealing the control line).

Claim Rejections - 35 USC § 103

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over French.

With respect to claim 2, French does not disclose that the pressure spike is a blow-out in the wellbore. However, French discloses that there are seals for sealing the flow control means and isolating the ports. Furthermore, blowouts can occur in all wellbores. Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention that the pressure spike would comprise a blow-out.

With respect to claim 20, French discloses a system for preventing blow-outs in a wellbore including a control line, comprising: a safety valve adapted to seal a tubing disposed in the wellbore in case of a blow-out (see column 3 lines 23-39); and a valve (24) adapted to seal the control line in case of a blowout (wherein valve 24 is adapted to seal the control line in case of a blowout as French discloses that valve can seal either the control line or the fluid outlet port to the downhole tool, see column 3 lines 46-52), wherein the valve enables pressure transfer through the control line from both a downhole and an uphole direction during normal operating conditions (see column 46-52, wherein pressure is transferred as fluid flows through the valve during normal operating conditions). French does not disclose a wellhead adapted to seal an annulus between the tubing and the wellbore in case of a blow-out. However, it is well known in

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the art to seal an annulus between the tubing and the wellbore in case of a blow-out.

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention to seal the annulus between the tubing and the wellbore in order to control pressure in case of a blow-out.

With respect to claim 21, French discloses that the valve comprises a shuttle valve (24).

With respect to claim 22, French discloses that the shuttle valve (24) is located in a housing (14).

With respect to claim 23, French discloses that the housing (14) is a joint that connects two tubing pieces together (wherein 14 connects to 12, see figure 1B).

With respect to claim 24, French discloses that the control line (65) is functionally connected to a downhole tool (see column 1 lines 36-39).

With respect to claim 25, French discloses that the control line (65) is used to hydraulically actuate the downhole tool (see column 1 lines 36-39).

With respect to claim 26, French discloses that the downhole tool comprises a valve, a packer or a perforating gun (see column 3 lines 23-39).

5. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over French in view of Schultz et al.

With respect to claims 11-13, French does not disclose two springs attached to the shuttle valve. Schultz et al. teaches springs around shuttle valves in order to bias the shuttle valve in a desired position. See column 4 lines 28-37. It would have been

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obvious to one having ordinary skill in the art at the time of the invention to modify French by including two springs as taught by Schultz et al. in order to bias the shuttle valve in a desired position.

6. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over French in view of Schwendemann (USP 6,450,263).

With respect to claims 18, 19, and 37, French does not disclose a rupture disk. Schwendemann discloses a rupture disk which is used to isolate chambers from annular well pressure, and which can be ruptured to connect two different pressure regions. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify French by including a rupture disk as taught by Schwendemann in order to isolate two different pressure regions and then connect them when desired.

Allowable Subject Matter

7. Claims 27-37 and 39-41 are allowed.

Response to Arguments

8. Applicant's arguments filed 1/16/07 have been fully considered but they are not persuasive. Applicant argues that the shuttle valve in the French reference is not adapted to seal the control line when a pressure spike occurs from the downhole direction and that the reference does not automatically seal the control line when a pressure spike occurs from the downhole direction. However, the valve in French is

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capable of sealing the control line when a pressure spike occurs from downhole and can automatically do this. It has been held that to be entitled to weight in the method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. Ex parte Pfeiffer, 1962 C.D. 408 (1961). In the instant case, the step of the shuttle valve sealing the control line when a pressure spike occurs from the downhole direction is not positively recited. The shuttle valve merely needs to be capable of sealing the control line. The valve in French is capable of sealing the control line.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicole Coy whose telephone number is 571-272-5405.

The examiner can normally be reached on M-F 7:30-5:00, 1st F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

nac


William Neuder
Primary Examiner